

Program Area: Residential

**Program: Appliance Recycling (1998 – 2002, Summer Initiative)** 

This program provides customers with a cash incentive for recycling old, inefficient refrigerators or freezers. This program began in 1993 in the SCE service territory and was operated by the Appliance Recycling Centers of America (ARCA) as a turnkey program. It was offered exclusively by SCE in SCE's service territory until the Summer Initiative program, when SCE contracted with ARCA to implement the program in the service territories of SCE, SDG&E, and PG&E. In 2002, the Residential Appliance Recycling Program became a statewide program offered in the SCE, PG&E and SDG&E service territories with SCE serving as the statewide administrator. Appliances are recycled in an environmentally responsible manner. ARCA recovers and recycles chlorofluorocarbons (CFC) and metals, along with non-CFC replacement refrigerants under section 608 of the 1990 amendments to the Clean Air Act.

# ARCA's responsibilities include:

- Scheduling and performing pickups.
- Program participant service activities including providing an inbound 800 telephone number for customers to access (English and Spanish), and a web page for program signup and inquiries (added in 2000). Web site content is approved by SCE.
- Verification of customer and refrigerator or freezer eligibility.
- Documentation of program participant data.
- Establishing and operating recycling centers.
- Dismantling the appliance and removing refrigerants in an environmentally safe manner.
- Processing and payment of incentives.
- Conduct of a program participant telephone survey, to elicit information on refrigerator, freezer use, customer demographics and customer satisfaction. Provide SCE with status reports on customer comments and complaints.

ARCA is paid in two installments. One installment covers the cost of incentives to the customers, and the other installment covers the recycling charge, handling fee, marketing and advertising costs.

# Program Performance

Exhibit B-1: Appliance Recycling Reported Program Performance (SCE Service Territory Only)

	1998	1999	2000	2001	2002	SI
Appliances Recycled	28,800	45,219	42,000	45,700	33,000	8,800
MWh Saved	24,500	65,000	61,750	53,613	57,287	
Peak Demand Reduction (MW)		15	14	9	9	
HTR	NA	NA	NA	NA	56.5% of applications	NA

Source: SCE Annual Reports, Data Response 118 Supplement.

## **Program Rules**

Exhibit B-2 provides program rules in effect during the period 1998 to 2002.

Exhibit B-2: Appliance Recycling Program Rules and Requirements

	1998	1999	2000	2001	2002	SI
Service Territory	SCE	SCE	SCE	SCE	All	All
Program Eligibility Requirements	Residential customer in above service territory	Residential customer in above service territory	Residential customer in above service territory	Residential customer in above service territory	Residential customer in above service territory  MF owners and reps	Residential customer in above service territory
Eligible Appliances	Spare refrigerators and freezers	Primary and secondary refrigerators and freezers	Primary and secondary refrigerators and freezers	Primary and secondary refrigerators and freezers	Primary and secondary refrigerators and freezers	Primary and secondary refrigerators and freezers
	Working condition and in use along with primary refrigerator for minimum of 6 months.	Working condition	Working condition	Working condition	Working condition	Working condition
Appliance Size	10-25 cu. ft.	10-25 cu. ft.	10-27 cu. ft.	10-27 cu. ft.	10-27 cu. ft.	10 cu. ft. or more
Number Eligible	2	2	2	2	2	2
Rebate Offered	\$25 check or \$50 bond	\$35 check or Thermo- electric cooler	\$35 check or Thermo- electric cooler	\$35 check or 5-pack of CFLs	\$35 check or 5-pack of CFLs	\$75

Source: SCE Data Response 97, 224.

**Program Area: Residential** 

Program: Residential Energy Surveys (Energy Audits) 1998 – 2002

Residential Energy Surveys help customers manage their energy use more efficiently. This program was designed to increase consumer awareness of energy efficiency opportunities, encourage adoption of energy-efficient practices, and induce a permanent change in attitudes and actions toward energy-efficient products and services. The surveys also provide a segue for offering other energy efficiency products and services, such as residential rebates and retail outlets that featured ENERGY STAR® qualified products.

The energy use analysis consists of a series of questions regarding the types and usage patterns of home lighting and heating and cooling systems as well as appliances. The results of the survey are provided to the customer in the form of a tailored energy-use report that explained the energy use in their home, provided saving recommendations, and recommended program information that may be helpful. Residential surveys are offered to the utilities' residential customers.

During the period 1998 to 2002, energy surveys were provided through a variety of communication vehicles:

- In-Home Audits were performed by a trained auditor. After the onsite walk-through, the energy auditor reviews the inventory and makes as many cost- effective energy-saving recommendations as possible. The auditor also explains the benefits of implementing these recommendations and addresses any remaining customer concerns. Appropriate program literature and referrals to other energy efficiency programs are given to the customer, together with a copy of the inventory.
- **Telephone Audits** were performed by a trained energy auditor. The trained energy auditor verbally walks the customer through the home and follows the same procedures as the in-home audit. Program literature and referrals to other energy efficiency programs are mailed to the customer, together with a copy of the inventory.
- Energy Use Profiles were completed and mailed in by customers. The Energy-Use Profile is a self-completed questionnaire that contains specific questions on the types of appliances, their usage pattern and the structure of the home. It is completed by the customer and then mailed in for processing. The questionnaire is processed and the customer receives computer generated graphs depicting their annual energy-use and itemized lists of their electric appliance energy usage. In addition, customers receive specific energy and cost savings recommendations. Customers also receive other educational material on other energy- efficient programs and services.
- Internet Surveys were performed through the utilities' websites. The On-Line Energy Survey began operation in 2000. The program allowed residential customers to receive the same personalized energy usage information and cost-savings recommendations over the Internet. Spanish and Asian language surveys were added to web site in 2002.

**Exhibit B-3** provides a listing of the utilities offering each type of survey.

Exhibit B-3: Types of Residential Energy Use Surveys Offered Each Year

	1998	1999	2000	2001	2002
In-Home Audits	SCE	SCE	SCE	SCE	SCE
Telephone Audits	SCE	SCE	SCE	SCE	All
Mail-In Audits (Energy Surveys)	SCE	SCE	SCE	SCE	All
Internet Survey			SCE	SCE	All

Source: PG&E, SCE, SDG&E and SCG Annual Reports.

# Program Performance

Exhibit B-4: Residential Energy Survey Program Performance

	1998	1999	2000	2001	2002
Number of Surveys					
PG&E					
SCE	50,300	56,740	45,000	56,00	32,000
SDG&E					
SCG					
MWh Savings					
PG&E					
SCE	12,084	13,000		9,261	
SDG&E					
SCG					

Source: SCE Annual Reports, Data Response 118 Supplement.

# **Program Area: Residential**

# **Program: Residential Contractor Program 1999 – 2001**

The Residential Contractor Program (RCP) was initiated in Program Year 1999 and was discontinued at the end of Program Year 2001. The purpose of the Residential Contractor Program was to promote a self-sustaining contractor market for energy efficiency services in the residential retrofit, renovation, and remodeling market. Specific program objectives included:

- Improving customers' awareness and understanding of the benefits associated with energy efficiency;
- Promoting whole system and whole house approaches to energy efficiency in the residential sector; and
- Providing standard incentives for contractors to help build self-sustaining businesses that provide diagnostic/tune-up procedures and installations of various energy efficiency measures to Customers.

The Residential Contractor Program initially served single family homeowners but was expanded in Program Year 2000 to include multifamily dwellings as well. RCP was offered by all utilities. Our audit reviewed this program at PG&E. PG&E's program rules include:

- The homeowner participating in the program must be a utility customer within PG&E's service area.
- The amount of the rebate paid must be consistent with the per-unit reimbursement amounts as specified by PG&E.
- The work must be performed by a contractor that has been certified by PG&E as eligible for program participation.
- The work must be performed under a home improvement contract entered into between the homeowner and PG&E approved contractor.
- The contract between the homeowner and contractor must incorporate (by reference), PG&E's standard contract addendum which identifies the amount of the voucher issued by PG&E to be used as a partial payment.
- The contractors invoice must demonstrate that the customer has been credited in an amount that is equivalent to the amount of the voucher issued by PG&E.

**Program Area: Nonresidential** 

Program: Express Efficiency 1999 – 2002

The Express Efficiency Program offers prescriptive rebates to nonresidential customers for qualifying energy efficiency retrofits. It became a statewide program in 1999. Until 2002, the Express Efficiency program had both "Downstream" and "Upstream" components. The downstream component program assists customers in replacing or retrofitting old inefficient equipment with new energy saving products. It covers most common energy saving measures. Measure types available for rebates included lighting retrofits, food service equipment retrofits, small air conditioning units, and other space conditioning measures The upstream component provided rebates to distributors of energy efficient motors, package air conditioners and heat pumps. The "upstream" component was eliminated in 2002.

**Exhibit B-5** provides selected Express Efficiency program rules.

Exhibit B-5: Express Efficiency Program Rules

	1999	2000	2001	2002
Downstream Program	ı			
Measures Eligible for Customer Incentive	Lighting A/C Refrigeration, Food service Gas Measures	Lighting A/C Refrigeration, Food service Gas Measures	Lighting A/C Refrigeration Gas Measures Agricultural Measures	Lighting A/C Refrigeration Gas Measures Agricultural Measures LED Motors
Rebate Amount Limit	<ul> <li>PGE: \$25,000 per account</li> <li>PCE: \$10,000 per account</li> <li>PER YEAR</li> </ul>	\$25,000 per small customer application, \$20,000 per large customer application, \$50,000 per corporate parent or government entity. Max does not apply to dimming electronic ballasts with day-lighting.	<ul> <li>PGE: \$100,000 per account per year, \$2 million per corporate parent</li> <li>SCE: \$25,000 per account per year</li> </ul>	\$25,000 per account per fuel per year
	The rebate can not exceed 100% of cost.	The rebate can not exceed 100% of cost.	The rebate can not exceed 100% of cost.	Can't exceed 100% of item cost
Double Dipping	A project is only eligible under one program. The same project may not be rebated more than once.	A project is only eligible under one program. The same project may not be rebated more than once.	A project is only eligible under one program. The same project may not be rebated more than once.	A project is only eligible under one program. The same project may not be rebated more than once.
Eligibility	Customers on some large customer rates with demand greater than 500 kW are not eligible to participate.	<ul> <li>Non residential customers contributing to the PGC are eligible.</li> <li>Have had annual usage less than 600 MWh during the 1999 calendar year.</li> <li>Generally GS-1 &amp; GS-2.</li> </ul>	<ul> <li>Non residential customers contributing to the PGC are eligible.</li> <li>Small-To-Medium: Small Business, Non Profit with a maximum monthly demand of 500 kW (generally GS-1 &amp; GS- 2). All Agricultural customers. High Energy Use includes customers with monthly electric demand over 500kW. This requirement may be filled by either individual or aggregated accounts.</li> </ul>	<ul> <li>Customers with an aggregated maximum demand less than 500 kW or 20,800 therms are eligible to participate. Non-profits, schools and government entities are not required to aggregate demand.</li> <li>Commercial, industrial and agricultural customers and non-profit organizations on agricultural GS-1 and GS-2 type rate schedules with a maximum monthly demand of 500 kW.</li> </ul>

Exhibit B-5: Express Efficiency Program Rules

	1999	2000	2001	2002
Inspection Required (Downstream Program)	Varies by Utility. PGE: Over \$5,000.	Varies by Utility.  PGE: Over \$5,000.  SCE: The energy efficiency program manager selects a minimum of 20% of businesses at random for inspection.	Varies by Utility.  PGE: Over \$2,500  SCE: The energy efficiency program manager selects a minimum of 20% of businesses at random for inspection.	Varies by Utility. PGE: Over \$2,500 SCE: Inspection selection is partly at random. SCE selects a percentage. If inspected, rebates are paid after inspection.
Upstream Program				
Trade Ally Measures (Upstream)	Motors Package Unitary A/C	Motors Package Unitary A/C	Motors Package Unitary A/C	No Upstream Programs
Inspection Required (Upstream Program)	Package ACFirst distributor Application – 5 site visits \$1,000 or 10% of units	Package AC one site per application the site with the highest number of tons	Package AC one site per application the site with the highest number of tons	No Upstream Programs
	MotorsFirst distributor Application 5 site visits \$1,000 or 10% of units	Motors – one site per application – the site with the highest number of motors	Motors – one site per application – the site with the highest number of motors	

**Program Area: Nonresidential** 

### Program: Standard Performance Contract (SPC) 1998 – 2002

The Standard Performance Contract (SPC) Program offers pay-for-performance incentives to nonresidential customers or energy efficiency service providers (project sponsors) for the implementation of energy efficiency projects. The program currently has two approaches: payment based on measured savings (M&V approach) or calculated savings (calculated approach). The program was first offered in PY1998 with only the M&V approach. The calculated approach was instituted in 2000 for small nonresidential customers and in 2001 for large customers.

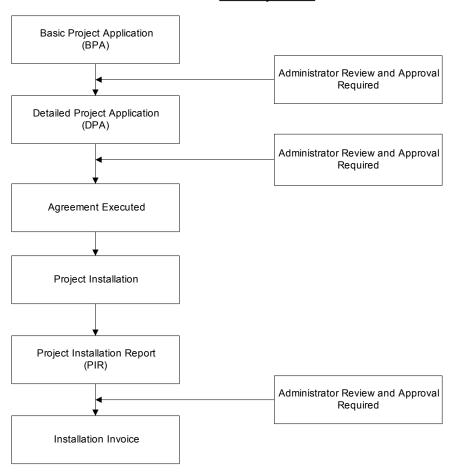
Third party Energy Efficiency Service Providers (EESPs) or customers (for customers acting as their own EESP) are paid a fixed price per kWh of electric energy savings or per therm resulting from retrofit installations of energy efficient systems or equipment in commercial or industrial customer facilities. Payments were made to the EESP over a two-year period based on measured performance of the installed systems.

Exhibit B-6, which follows, provides a general overview of the project submittal and approval process for a project in the 1998 SPC. Subsequent program changes are discussed later in this section. Applicants initially submit a Basic Project Application (BPA) outlining the types of measures to be installed and the estimated energy savings. In certain years an application fee of \$250 was submitted with the BPA. Upon review and acceptance of the BPA, the utility reserves funds for the proposed projects. This reservation is frequently referred to as a commitment. The EESP subsequently submits a detailed project application (DPA) which serves as the basis for the utility's agreement with the EESP. The DPA presents the EESP's detailed proposal for the project and includes: a detailed survey of the existing and proposed equipment; site information and site maps; equipment operation; savings calculation worksheets; measurement and verification (M&V) plan; customer affidavit; and project schedule. An installation deposit was also submitted with the DPA. The customer affidavit is signed by the host customer and acknowledges parties responsibilities under the SPC program. Following acceptance of the DPA, the utility entered into a signed contract with the EESP, and a pre-installation inspection was performed.

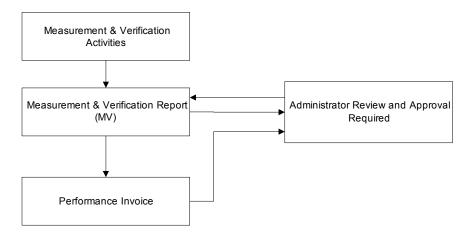
Upon installation, the EESP submits a Project Installation Report (**PIR**), detailing the installed project, and the installation invoice requesting the first payment. The utility conducts a post-installation inspection, and based on the inspection may adjust the paid amount. EESP's are required to submit the first M&V or Annual Savings Report (**MV1** or **ASR1**), one year following installation. MV1 provides the first-year verified energy savings for the project. The first performance invoice is submitted, and it is paid following acceptance of MV1. One year later the second M&V report is submitted (**MV2**) along with the second performance invoice. MV2 reports the second year verified energy savings. The final payment is made based on the verified average energy savings during years one and two.

Exhibit B-6: The SPC Project Submittal and Approval Process Requires Periodic Administrator Review and Approval

### Initial Project Tasks



### **Annual Tasks**



**Exhibit B-7** provides a list of key procedural changes during program years 1999 through 2002.

Exhibit B-7: Key Changes in the Evolution of the SPC Program [Note 1]

Program Year	Key Changes
1999	<ul> <li>Program divided into large and small SPC</li> <li>Addition of gas measures in PG&amp;E and SDG&amp;E service territory</li> <li>Lower incentives and some measures reclassified</li> <li>Additional information required with BPA</li> <li>Changes in due dates</li> <li>Changes in caps</li> <li>M&amp;V protocols for selected measures were simplified.</li> </ul>
2000	<ul> <li>Adds a participation bonus and peak incentive for small SPC</li> <li>Application fee and deposit eliminated.</li> </ul>
2001	<ul> <li>Small and large SPC programs merged</li> <li>Incentives increased</li> <li>BPA eliminated</li> <li>Calculated savings approach added</li> <li>All customers can self-sponsor programs</li> <li>Performance period shortened (6 months calculated, one year M&amp;V)</li> <li>Small customer bonus added.</li> </ul>
2002	<ul> <li>Format of customer affidavit changed</li> <li>No M&amp;V report required for calculated savings. Payment received after PIR.</li> <li>All customers will use calculated approach unless utility administrator determines Measured approach is necessary</li> <li>No peak demand or small customer bonuses</li> <li>Limitations placed on lighting.</li> </ul>

Note 1: This list does not include all program changes.

As administrators for the SPC program, the utilities' responsibilities include:

- Reviewing and approving project applications;
- Inspecting project sites to verify the validity of applications;
- Overseeing program implementation;
- Reviewing savings estimates and M&V plans and providing oversight of M&V activities;
- Contracting with project sponsors; and,
- Authorizing and issuing incentive payments.

PG&E and SCE use contractors (Technical Consultants) to perform certain SPC tasks, including:

• Review of customer applications for completeness, compliance with program guidelines, accuracy of energy calculations, and computation of expected incentive amounts;

- Recommendations on acceptance, modification, suspension or rejection of a project or a project submittal; and,
- Inspecting project sites to verify the validity of project applications, installation reports, and energy savings results.

Certain of these tasks are performed by utility personnel at SDG&E.

Exhibit B-8 provides selected SPC program rules.

Exhibit B-8: Standard Performance Contract Program Rules

	1998 Statewide Program	1999 Statewide Program	2000 Statewide Program	2001 Statewide Program	2002 Statewide Program
Fees and Deposits	ts				
Application Fee	\$250 non-refundable	\$250 non-refundable	None		
Installation Deposit	5% of total estimated incentive payment (DPA); released or returned upon PIR. If project not capable of commercial operation, deposit applied to program administration costs.	2.5% of total estimated incentive payment (LCSPC and SCSPC)	2.5% of total estimated incentive payment, only if estimated incentive amount is greater than \$100,000 (LCSPC only)		
Rebate Amount Limit	-imit				
Project Sponsor Cap	30% of SPC funds managed by each utility	25% of total SCSPC incentive funds and 25% of total LCSPC incentive funds managed by each utility	25% of total SCSPC incentive funds and 25% of total LCSPC incentive funds managed by each utility	25% of total SCSPC incentive funds and 25% of total LCSPC incentive funds managed by each utility	25% of allocated SPC incentive funds managed by each utility
Utility Affiliate Caps	Not applicable	15% of total SCSPC incentive funds and 15% of total LCSPC incentive funds managed by each utility	15% of total SCSPC incentive funds and 15% of total LCSPC incentive funds managed by each utility	15% of total SCSPC incentive funds and 15% of total LCSPC incentive funds managed by each utility	25% of allocated SPC incentive funds managed by each utility
Customer Site Cap	SCE: 15% of incentive funding	\$40,000 SCSPC \$400,000 for LCSPC	No site cap for SCSPC \$400,000 for LCSPC	\$200,000 small customer (SCSPC) \$500,000 large customer (LCSPC)	\$300,000
Corporate Parent Cap	Not applicable	<ul> <li>\$200,000 statewide SCSPC</li> <li>\$1.5 million statewide per corporate parent or government agency for LCSPC</li> <li>\$1.5 million statewide combined</li> <li>(limited in the first half of the year \$400k in SDG&amp;E service territory and \$750k each in SCE and PG&amp;E)</li> </ul>	<ul> <li>\$200,000 statewide SCSPC</li> <li>\$1.5 million statewide per corporate parent or government agency for LCSPC</li> <li>\$1.5 million statewide combined</li> <li>(limited in the first half of the year \$400k in SDG&amp;E service territory and \$750k each in SCE and PG&amp;E)</li> </ul>	<ul> <li>\$200,000 statewide SCSPC</li> <li>\$2 million statewide (LCSPC)</li> <li>\$2 million statewide combined</li> </ul>	\$1.5 million statewide
State and Federal Government Caps	Not applicable	\$ \$200,000  \$ 6 million statewide in total for the sum of all agencies for LCSPC  \$ 6 million statewide combined  Individual agencies limited to \$1.5 million statewide. The first half limits described under corporate parents apply to the agencies.	\$\\$200,000\$ statewide SCSPC \$\\$6\$ million statewide in total for the sum of all agencies for LCSPC \$\\$6\$ million statewide combined Individual agencies limited to \$1.5 million statewide. The first half limits described under corporate parents apply to the agencies.	<ul> <li>\$200,000 statewide (SCSPC)</li> <li>\$6 million statewide (LCSPC)</li> <li>\$6 million statewide combined</li> </ul>	\$4,000,000 statewide

# Exhibit B-8: Standard Performance Contract Program Rules

	1998 Statewide Program	1999 Statewide Program	2000 Statewide Program	2001 Statewide Program	2002 Statewide Program
Payment Schedule	ale				
	40% PIR; up to 70% of the contracted annual savings less the amount of the first payment after the approval of the first M&V up to 110% of the contracted annual savings less the previous two payments after approval of the second M&V report (based on average MV1 and MV2 savings).	LCSPC 40% PIR; 70% of the value of the verified energy savings less amount of first installment after MV1; 100% of the average of the monetary value of the first and second verified annual energy savings less amounts of the first and second installments after MV2 (up to 110% of amount in application).  SCSPC 40% PIR, Participation incentive paid in full; 60% following approval of ASR (up to 110% total)	LCSPC  40% PIR; 70% of the value of the verified energy savings less amount of first installment after MV1; 100% of the average of the monetary value of the first and second verified annual energy savings less amounts of the first and second installments after MV2 (up to 110% of amount in application).  SCSPC  60% PIR, Participation incentive paid in full; 40% following approval of ASR (up to 110% total)	60% PIR, if applicable, summer peak demand incentive and small customer incentive paid in full at time of first payment; remaining 40% paid at completion of project performance period (MV) 6 months for calculated savings and one year for measured savings.	100% at PIR for calculated savings approach. All projects use calculated unless utility administrator decides otherwise. 60% of approved energy savings incentive plus 10% M&V incentive for measured approach at PIR; remaining 40% (or adjusted amount up to 10% higher than amount estimated in approved project application for higher than estimated energy savings) 1 year later (MV).
Inspections					
	Minimum 2 inspections: preand post-installation. Utility administrator may conduct an inspection to observe and verify M&V at any time after project installation.	LCSPC Minimum 2 inspections: pre- and post- installation. Utility administrator may conduct an inspection to observe and verify M&V at any time after project installation.  SCSPC Optional: Utility administrator may conduct on-site inspections at his or her discretion. Can occur re-installation, post installation and at the end of the project.	LCSPC Minimum 2 inspections: pre- and post- installation. Utility administrator may conduct an inspection to observe and verify M&V at any time after project installation.  SCSPC Optional: Utility administrator may conduct on-site inspections at his or her discretion. Can occur re- installation, post installation and at the end of the project.	Pre-installation site inspection (can be conducted twice with payment penalties) after receipt of application. Post installation site-inspection (usually) after receipt of installation report. Upon receipt of operating report (or at any time during the performance period) the Utility Administrator may request a site inspection.	Pre-installation site inspection (can be conducted twice with penalties) after receipt of application. Post installation site-inspection (usually) after receipt of installation report. For measured savings applicants, administrator may request a site inspection following submittal of the operating report (1 year after install).

Exhibit B-8: Standard Performance Contract Program Rules

	1998 Statewide Program	1999 Statewide Program	2000 Statewide Program	2001 Statewide Program	2002 Statewide Program
Customer Affidavit		,		,	
	Signed customer affidavit is required as part of detailed project application.	Signed customer affidavit is required as part of detailed project application (LCSPC and SCSPC).	Signed customer affidavit is required as part of basic project application (LCSPC and SCSPC).	Signed customer affidavit is required as part of the project application.	Customer acknowledgement.
Program Close Date	Date				
	December 31, 2001	ASR by May 10, 2003 (LCSPC) ASR by Mar 1, 2002 (SCSPC)	All payments by May 10, 2004 (LCSPC), MV1 roughly 2/15/03, MV2 roughly 2/15/04. May 10, 2003 for (SCSPC)	Installation by June 1, 2002. Operating Report 6 months or one year later.	Installation by June 1, 2003. Operating report one year later for measured savings.

Source: Standard Performance Contract Policies and Procedures and Participant Handbooks, SCE Data Response 91.

Program Area: New Construction (Nonresidential)
Program: Savings by Design (SBD) 2000 – 2002

Savings by Design (SBD) fosters integrated building design techniques and practices that contribute to energy efficient facilities. SBD is a statewide program designed to encourage high performance commercial building design and construction. The program addresses both large and small commercial new construction market segments including the public, private, and speculative construction markets. This program encouraged building owners, developers, and lenders, in light of the change in California's Title 24 standards, to continue to make energy efficient design and construction decisions through analysis of financial benefits resulting from energy efficiency, including life cycle cost considerations.

The SBD process seeks to permanently reduce the transaction costs associated with developing and evaluating energy efficiency design alternatives. It also works to improve the comfort, efficiency, and performance of buildings by promoting an integrated team approach to design. The program provided direct benefits to all market actors and market segments, including building owners (large or small, public or private, occupant or developer) and design professionals involved in new buildings design and construction.

SBD offered two alternative approaches to energy efficiency: Systems Approach and Whole Building Approach, and three types of assistance:

- Design Assistance technical assistance and resources to teams involved in the design of commercial and industrial buildings. Includes recommendations for efficient equipment and consultation on enhanced design strategies;
- Financial Incentives to building owners when the efficiency of the new building exceeds the minimum SBD requirements; and
- Design Team Incentives offered to support the extra effort for integrated energy design and to reward exceptional design accomplishments.

**Exhibit B-9** shows the eligible incentives under each approach.

Exhibit B-9: SBD Program Approaches and Assistance

Approach: Systems Approach	The Systems Approach is used for projects where design of the energy systems was done at different phases: where one energy system predominated, intervention occurred late in the design, or for small buildings with simple system interactions.
Eligible Assistance	Design Assistance, Owner Incentives
Approach: Whole Building Approach	The Whole Building Approach was used for projects where the design team can work closely to integrate the building's energy systems for buildings with complex system interactions and for large, multi-use facilities.
Eligible Assistance	Design Assistance, Owner Incentives, Design Team Incentives

Exhibit B-10 provides selected SBD program rules.

Exhibit B-10: Savings by Design Program Rules

	2000	2001	2002
Customer Eligibility	Must be located in utility service territory and subject to PGC.	Must be located in utility service territory and subject to PGC.	Must be located in utility service territory and subject to PGC and/or gas surcharge. Industrial and Agricultural can now participate.
Project Eligibility	<ul> <li>Nonresidential new construction or major renovation projects with interacting building loads.</li> <li>Incentives are paid for new construction only.</li> <li>Buildings added to an existing central plant are calculated considering the new building improvements only.</li> </ul>	<ul> <li>Nonresidential new construction or major renovation projects.</li> <li>Chain accounts, with multiple locations whose projects use a standard design will be eligible for all services offered through the Whole Building Approach for the initial SBD project. All subsequent projects constructed with same design will not be eligible for Design Analysis services or Design Team Incentives. Project still eligible for Owner Incentives through Whole Building Approach</li> </ul>	<ul> <li>New construction, addition or expansion project</li> <li>Major renovation/remodel project which involves building system redesign, load increase or change of occupancy</li> </ul>
Program Term	First-come, first-served basis. Utility will make commitments until December 31, 2000.	First-come, first-served basis. Utility will make commitments until December 31, 2001.	First-come, first-served basis. Utility will execute a Savings by Design Incentive Agreement for eligible projects until December 31, 2002 or until 2002 funding is depleted
Commitment Term	<ul> <li>Construction must be substantially complete and documentation must be submitted within 36 months from execution of Incentive Agreement.</li> <li>If project's completion is delayed beyond final date, Agreement is voided, but project may be eligible under the program guidelines in effect at that time.</li> </ul>	<ul> <li>Construction must be substantially complete and documentation must be submitted within 36 months from execution of Incentive Agreement.</li> <li>If project's completion is delayed beyond final date, Agreement is voided, but project may be eligible under the program guidelines in effect at that time.</li> </ul>	<ul> <li>Construction must be substantially complete and documentation must be submitted within 36 months from execution of Incentive Agreement.</li> <li>If project's completion is delayed beyond final date, Agreement is voided, but project may be eligible under the program guidelines in effect at that time.</li> <li>The utility will not commit incentives exceeding \$600,000 per owner per utility service territory for multiple projects submitted in a program year.</li> </ul>

Exhibit B-10: Savings by Design Program Rules

	2000	2001	2002
Rebate Limit			
Whole Building Approach	Owner Incentives \$150,000 per freestanding building or individual meter.  Design Team Incentives \$50,000 per project (and apply only once per design effort).	Owner Incentives \$150,000 per freestanding building or individual meter. Design Team Incentives \$50,000 per project (and apply only once per design effort).	Owner Incentives \$150,000 per project. Design Team Incentives \$50,000 per project.
Systems Approach	Owner incentives \$75,000 per freestanding building or individual meter.	\$75,000 per freestanding building or individual meter.	\$75,000 per project.
	Can't exceed 50% of efficiency upgrade incremental cost	Can't exceed 50% of efficiency upgrade incremental cost	Can't exceed 50% of efficiency upgrade incremental cost.
Incentive Rate			
Whole Building Approach	<u>Owner</u> \$.06 - \$.18/kWh \$.03 - \$.06/kWh	<u>Owner</u> \$.06 - \$.18/kWh \$.03 - \$.06/kWh	<u>Owner</u> \$.06 - \$.18/kWh \$.03 - \$.06/kWh
Systems Approach	Not specified in program materials.	Not specified in program materials.	Daylighting - \$.04/kWh Interior Lighting - \$.06/kWh HVAC - \$.12/kWh, \$.34/therm Service Hot Water Systems - \$.34/therm Supermarket Refrigeration - \$.06/kWh Process Systems - \$.03/kWh, \$.34/therm
Entry Level (% beyond T24			
Whole Building Approach	Owner Incentives 10%. Design Team Incentives 15%.	Owner Incentives 5%. Design Team Incentives 10%.	Owner Incentives 10%. Design Team Incentives 15%.
Systems Approach	Various	Various	Various